

Appl. No. 09/734,281  
Amendment dated 8 March 2004  
Reply to Office Action of 8 January 2004

**Amendments to the Claims:**

This listing of claims will replace all prior versions and listings of claims in the application.

**Listing of Claims:**

1-20. (Canceled)

21. (Amended) A monoclonal antibody wherein ~~said monoclonal antibody~~ that forms an immunological complex with:

(a) ~~with a peptide~~ <sup>\*</sup><sup>\*</sup>YSSPGSPGT (SEQ ID NO 1); ~~or~~ <sup>\*</sup>YSSPGSPGT (SEQ ID NO 2);

~~wherein said peptide is phosphorylated at a position marked with \*, or~~

(b) ~~or with any other peptide forming an immunological complex with a monoclonal~~

~~antibody, which forms a complex with peptide~~ <sup>\*</sup>YSSPGSPGT (SEQ ID NO 1) ~~or~~ <sup>\*</sup>YSSPGSPGT (SEQ ID NO 2), where said peptide is phosphorylated at a position marked with \*, and wherein said monoclonal antibody does not bind nonphosphorylated forms of (a) or (b).

22-23. (Canceled)

24. (Amended) A hybridoma ~~which~~ that secretes a monoclonal antibody, ~~wherein said monoclonal antibody~~ that forms an immunological complex with:

(a) ~~with a peptide~~ <sup>\*</sup><sup>\*</sup>YSSPGSPGT (SEQ ID NO 1); ~~or~~ <sup>\*</sup>YSSPGSPGT (SEQ ID NO 2);

~~wherein said peptide is phosphorylated at a position marked with \*, or~~

(b) ~~or with any other peptide forming an immunological complex with a monoclonal antibody, which forms a complex with peptide~~ <sup>\*</sup>YSSPGSPGT (SEQ ID NO 1) ~~or~~

<sup>\*</sup>YSSPGSPGT (SEQ ID NO 2);

where said peptide is phosphorylated at a position marked with \*, and wherein said monoclonal antibody does not bind nonphosphorylated forms of (a) or (b).

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25-28. (Canceled)

29. (Amended) A kit comprising:

a monoclonal antibody that that forms an immunological complex with  
a phosphorylated polypeptide comprising the sequence:

(a) — ~~A first monoclonal antibody wherein said monoclonal antibody forms an immunological complex~~

~~(i) (a) with a peptide~~ <sup>\*</sup> <sup>\*</sup> ~~YSSPGSPGT (SEQ ID NO 1); or YSSPGSPGT (SEQ ID NO 2), wherein said peptide is phosphorylated at a position marked with \*, ; or~~

~~(ii) (b) or with any other peptide forming an immunological complex with a monoclonal antibody, which forms a complex with peptide YSSPGSPGT (SEQ ID NO 1)~~

<sup>\*</sup>  
~~or YSSPGSPGT (SEQ ID NO 2).~~

wherein said peptide is phosphorylated at a position marked with \*; and wherein said monoclonal antibody does not bind nonphosphorylated forms of (a) or (b); and a buffer solution.

30. (previously presented) A monoclonal antibody according to claim 21, wherein ~~said monoclonal antibody that~~ forms an immunological complex with an epitope of the human abnormally phosphorylated tau protein comprising a phosphorylated serine.

31. (Amended) A kit according to claim 29 further comprising a second antibody ~~recognizing a different epitope from said first monoclonal antibody, the second antibody being a monoclonal antibody protein or which is a polyclonal antibody of normal tau, or of abnormally phosphorylated tau protein or which is a polyclonal antibody of normal tau, or of abnormally phosphorylated tau that binds normal tau.~~

32. (Amended) ~~A The~~ kit according to claim 29, further comprising a buffer solution ~~for carrying out the immunological reaction between said first monoclonal antibody and test~~

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sample second antibody that binds abnormally phosphorylated tau at a different epitope than the first antibody.

33. (Amended) ~~A The kit according to claim 31, further comprising a buffer solution for carrying out the immunological reaction between said first monoclonal antibody and a test sample and the second antibody and the marker wherein the second antibody is a monoclonal antibody.~~

34. (New) A kit according to claim 31, wherein the second antibody is a polyclonal antibody.

35. (New) A kit according to claim 29, wherein the buffer solution is adapted for carrying out the immunological reaction between said first monoclonal antibody and test sample.

36. (New) A kit according to claim 31, wherein the buffer solution is adapted for carrying out the immunological reaction between said second antibody and the marker.

37. (New) A kit according to claim 35, wherein the buffer is phosphate buffered saline (PBS).

38. (New) A monoclonal antibody that forms an immunological complex with YSSPGSPGT<sup>\*</sup><sup>\*</sup> (SEQ ID NO 1), where said peptide is phosphorylated at a position marked with \*, and wherein said monoclonal antibody does not bind nonphosphorylated forms of the peptide.

39. (New) A monoclonal antibody that specifically binds YSSPGSPGT<sup>\*</sup> (SEQ ID NO 2). where said peptide is phosphorylated at a position marked with \*, and wherein said monoclonal antibody does not bind nonphosphorylated forms of the peptide.

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40. (New) A kit comprising:

a monoclonal antibody that specifically binds YSSPGSPGT (SEQ ID NO 1);  
wherein said peptide is phosphorylated at a position marked with \*; and wherein said  
monoclonal antibody does not bind nonphosphorylated forms of the peptide; and  
a buffer solution.

41. (New) A kit comprising:

a monoclonal antibody that specifically binds YSSPGSPGT (SEQ ID NO 2),  
wherein said peptide is phosphorylated at a position marked with \* and wherein said monoclonal  
antibody does not bind nonphosphorylated forms of the peptide; and  
a buffer solution.

42. (New) The kit according to claim 40, wherein said monoclonal antibody is immobilized  
on a solid substrate.

43. (New) The kit according to claim 41, wherein said monoclonal antibody is immobilized  
on a solid substrate.

44. (New) The monoclonal antibody of claim 21, wherein said peptide is abnormally  
phosphorylated tau protein of 64kDa.

45. (New) A monoclonal antibody of claim 21, wherein said peptide is abnormally  
phosphorylated tau protein of 68kDa.

46. (New) A hybridoma that secretes a monoclonal antibody that binds abnormally  
phosphorylated tau protein of 68kDa.

47. (New) A hybridoma that secretes a monoclonal antibody that binds abnormally  
phosphorylated tau protein of 64kDa.

48. (New) A hybridoma cell, deposited at European Collection of Animal Cell Cultures, and  
having Accession number ECACC 91100806.